

## Chapter 16

# Why Musicians Study Keys

A question often asked by beginning guitarists is "What do you mean when you say a piece is in a major or minor key? And what use is it to know about keys?"

This is a bigger question than it first appears. As an example, let us look into the key of C major. Johnny Cash, Wolfgang Amadeus Mozart and Duke Ellington all composed music in the key of C Major. Over hundreds of years countless compositions in C major have been written and played. So despite easily hearable differences in style, what are the main elements of musical structure that all pieces in the key of C Major share in common?

To answer this question let us now look at the fundamental structural elements of the key of C Major.

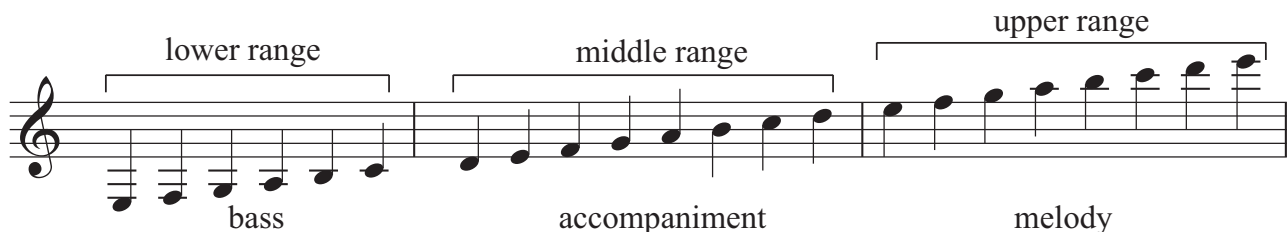
### The Scale of C Major

The universally shared common ground among pieces in C Major is the scale from which the music is derived. Here are the notes of the C Major scale written in one octave:



When you play these notes you will of course intuitively recognize the quality of the scale. These are the white keys of a piano keyboard and the natural notes of all other instruments, including the guitar.

Now let's begin to explore the complete set of notes on the guitar that comprise the C Major scale. The lower range (shown below) is found on the 6th and 5th strings. The 4th, 3rd and 2nd strings contain the middle range. The upper range is mostly found on the 1st string. (We stop for convenience at the 12th fret of the 1st string, but the notes of the C scale continue up to the final fret of the fingerboard.)



As a general guide the lower range is where most bass notes are placed, the middle range includes bass, accompaniment and melody notes, and the upper range is mostly used for melody notes.

### The Chords of C Major

Returning to our initial scale of one octave, we will now use the notes of the scale to build the chords most commonly used in the key of C Major:



It is not immediately necessary, but if you wish to review the chapter on how chords are built, that may serve as a refresher as to how and why the chord notes above are generated.

For now just keep in mind that the 7 notes of a C major scale are used to create melody.  
Also the same 7 notes are used to build the set of chords that naturally belong to the key.

During the first years of my own study of the guitar I always had the feeling that the *next* note or chord could be *any note or any chord found on any part of the fingerboard.*

Although that feeling was not completely wrong, I just did not have any useful concept of how notes of a piece of music were organized. In fact any "next" note has a very high probability of belonging to the scale itself. And any "next" chord will probably belong to the set of chords natural to the key.

The 7 notes of the scale are in essence a kind of DNA from which all the music in that key is created. It is easy to deduce that a knowledge of the scale itself is a way to greatly advance your playing.

Trained professional musicians seemingly make music effortlessly, but it is not just by talent alone. Part of their mastery is because they have understood concepts of musical structure that vastly simplify musical actions. Music for the novice is truly a complicated and often confusing enterprise. Developing as a musician can be thought of as a gradual transformation of the complicated into the simple. This process is available to everyone. This is because music, like language, has an intrinsic structure and our minds are capable of observing and applying the elements of structure to our musical activities.

Even so, musical concepts, while valuable in themselves, need to be cultivated in the mind of each player, along with patience, a sense of adventure and a serious intent to develop musical understanding.

But for now let us limit our exploration to the two most important chords that comprise the harmonic structure of the key of C Major.

## Two Chords

The two chords are written below:



Why these two chords? To explore the answer let's introduce three terms of music theory. They will be useful for continuing this discussion and also for later in your studies.

1. **Root.** The term "root" means the note that generates a chord. The root is the note that gives any chord its name. So in our current discussion the note C is the *root* of the C major chord.
2. **Tonic.** The term "tonic" means the first and main note of the scale or key. Tonic also refers to the chord built on the first note of the scale. So in our discussion, the note C is the tonic of the key of C major, and the C major chord is the tonic chord of the key of C.
3. **Dominant.** The word "dominant" refers to both the *note* and the *chord* that is built on the fifth note of the scale. In our discussion the note G is the fifth note of the C scale and is called the dominant.

Students often ask: "Why do I need to bother with theory? I just want to play music on my guitar." Well, in truth you can skip these concepts and immediately get going as best as you can.

This is possible, in my opinion, because everyone's musical mind already knows a vast amount about music. Musical knowledge is embedded in intuition and functions on your behalf at all times.

Perhaps the essential point is that a trained musician and a novice process music notation very differently. Of course everyone sees the same staff, notes, rhythms, etc. Look at the example below:

### Novice View



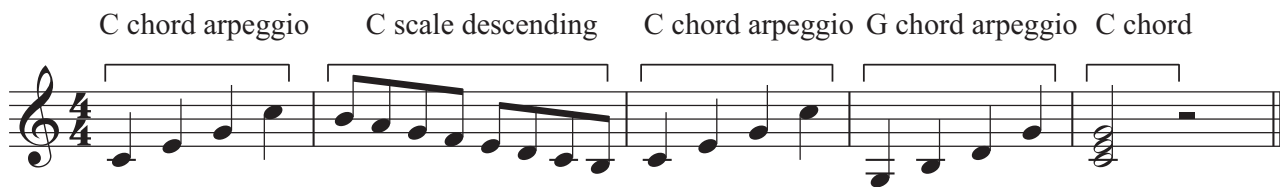
The novice guitar player looks at the first note, names it, checks which string and fret it is played on, figures out which fingering to use, then plays it. Proceeding one note at a time, as if stringing pearls on a necklace, the novice is limited to this repetitive exercise until he, by intuition, or by conscious application, deepens his approach.

So how does the trained musician see differently than the novice?

The trained musician sees and organizes the sequences of notes into musical blocks and at a glance sees the key, the scale, the chords and the overall musical design. This is done by having learned basic concepts and applying them to the score. Once you begin integrating these basic concepts you will no longer read music as an endless chain of notes, but rather according to how the music is organized.

The trained musician sees the notes and groups them something like the example below:

### Trained View



Instead of 23 separate notes, begin to see how notes can be grouped according to musical design: scales, chords and arpeggios are universal design elements. Each of the 5 segments bracketed above is either a scale, chord or arpeggio. Use this example as a model for your own study of the music you play. Play each segment separately until you can play all notes within each group as a single unit.

There is nothing miraculous or inaccessible about this. It is merely a matter of intent, emphasis and follow through. Just as painters observe and enjoy the play of light in nature and art, we musicians enjoy and savor the infinite display of musical patterns that manifest out of the primary elements of scale, chord and arpeggio.

As you listen to the music, observe how your musical imagination responds to these elements of musical structure. You can thereby initiate a lifelong adventure of discovery and enjoyment.

